



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/529,499	01/17/2006	Clifford A Buxton	32860-000854-US	8523
30596	7590	11/14/2006	EXAMINER	
HARNESSE, DICKEY & PIERCE, P.L.C.			FISHMAN, MARINA	
P.O.BOX 8910			ART UNIT	
RESTON, VA 20195			PAPER NUMBER	

2832

DATE MAILED: 11/14/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b> 10/529,499	<b>Applicant(s)</b> BUXTON ET AL.	
	<b>Examiner</b> Marina Fishman	<b>Art Unit</b> 2832	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☒ Responsive to communication(s) filed on 17 January 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-8 and 10-20 is/are rejected.
- 7) ☒ Claim(s) 9 is/are objected to.
- 8) ☒ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |   |   |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)  | 5) <input type="checkbox"/> Notice of Informal Patent Application                       |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date <u>03/29/2005</u> | 6) <input type="checkbox"/> Other: _____  |

## **DETAILED ACTION**

### ***General status***

1. This is a First Action on the Merits. Claims 1 - 10 are pending in the case and are being examined.

### ***Priority***

2. Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.

### ***Claim Rejections - 35 USC § 112***

3. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

4. Claims 6 and 8 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 6 recites the limitation "the retaining web" in line 3. There is insufficient antecedent basis for this limitation in the claim.

Claim 8, it is not clear what is meant by "bearing element forms a number, which corresponds to the number of switching poles of low voltage power circuit breaker, of accommodating areas".

### ***Claim Rejections - 35 USC § 102***

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

Art Unit: 2832

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

6. Claims 1 – 8 and 10 – 22 are rejected under 35 U.S.C. 102(b) as being anticipated by Morel et al. [US 6,248,971].

Morel et al. disclose an arrangement, comprising:

- a low-voltage power circuit breaker [10];
- a switching gas damper [56, Figure 3] provided with a bearing element [surface of 56], the switching gas damper being arranged above an arc-quenching chamber [26] of the low-voltage power circuit breaker and including at least one inlet opening [opening in 56], formed by the bearing element and for switching gases and at least one outlet opening [openings in plate above plates 58, Figure 3], for damped or completely ionized switching gases;
- wherein the bearing element is fixable on a housing [12, 14, 16, Figure 1] accommodating the low-voltage power circuit breaker immediately adjacent to the arc-quenching chamber and forms at least one accommodating area for a flow element [58], adapted to build up a flow resistance for the switching gases;
- wherein at least one accommodating area is closable by at least one closure element [top plate –not numbered–above

plates 58, Figure 3] adapted to fix the at least one flow element, and wherein in that the at least one closure element forms the at least one outlet opening.

Regarding Claim 2, the switching gas damper, disclosed by Morel et al., adapted to be positioned in relation to the arc-quenching chamber by means of selectable spacer element [element below 56 - not numbered]. Regarding Claims 3 and 16, Morel et al. disclose the accommodating area for the flow element is formed by a trough-like depression in the bearing element. Regarding Claims 4 and 17, Morel et al. disclose a base of the trough-like depression, whilst forming an at least partially peripheral retaining web, at the same time forms the inlet opening for the switching gases into the switching gas damper. Regarding Claims 5 and 18, a retaining web formed on opposing narrow sides is disclosed in Figure 3 (not numbered). Regarding Claims 6 and 19, the at least one flow element is formed by perforated plates. Regarding Claims 7 and 20, the total height of the flow elements corresponds to the total height of the bearing element [Figure 2]. Regarding Claim 8, the number of accommodating areas in the bearing element corresponds to the number of switching poles of the low-voltage power circuit breaker [Figure 4]. Regarding Claim 10, the housing accommodating the low-voltage power circuit breaker is in the form of a withdrawable part rack for the purpose of arranging the low-voltage power circuit breaker in a switchgear cell of at least one of a switchgear cabinet and or of a switchgear assembly, such that it is displaceable [Figure 4]. Regarding Claim 11, the bearing element, is fixed to sidewalls of the withdrawable part rack. Regarding Claim 12, the accommodating area for the flow

Art Unit: 2832

element [58] is formed by a trough-like depression in the bearing element [56].

Regarding Claim 13, wherein a base of the trough-like depression, whilst forming an at least partially peripheral retaining web [two thinner sidewalls], at the same time forms the inlet opening for the switching gases into the switching gas damper.

Regarding Claim 14, Morel et al. disclose a switching gas damper [56, 58] for a low-voltage power circuit breaker [10], the switching gas damper, comprising:

- at least one inlet opening [Figure 3], formed by a bearing element [56], for switching gases; and
- at least one outlet opening [in a plate above top 58] for damped or completely ionized switching gases;
- wherein the switching gas damper is arrangeable above an arc-quenching chamber [26] of the low-voltage power circuit breaker;
- wherein the bearing element is fixable on a housing accommodating the low-voltage power circuit breaker immediately adjacent to the arc-quenching chamber and forms at least one accommodating area for a flow element adapted to build up a flow resistance for the switching gases;
- wherein the at least one accommodating area is closable by at least one closure element [top plate, not numbered, Figure 3] adapted to fix the at least one flow element, and

wherein the at least one closure element forms the at least one outlet opening.

Regarding Claim 15, the switching gas damper is adapted to be positioned in relation to the arc-quenching chamber by selectable spacer element [circular spacers, Figure 3].

### ***Allowable Subject Matter***

7. Claim 9 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

### ***Conclusion***

8. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Baginski et al. [US 4,884,047], Leone et al. [US 4,876,424], Crooks et al. [US 6,762,389] all disclosed arc extinguisher for switchgears. Applicant also should consider these references in response to this office action. Should issue arise concerning the rejection presented above, these references may be relied upon in a subsequent action to support the lack of novelty or obviousness of claimed subject matter to one of ordinary skill in the art.


9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Marina Fishman whose telephone number is 571-272-1991. The examiner can normally be reached on 7-5 M-T.

Art Unit: 2832

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Elvin Enad can be reached on 571-272-1990. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Marina Fishman  
November 2, 2006

  
ELVIN ENAD  
SUPERVISORY PATENT EXAMINER  
CF NOV 06